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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **LE PHAN, Kim**
[VN/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: **DE, JONG, Durk, Jan**; Prof. Holstlaan 6,
NL-5656 AA Eindhoven (NL).

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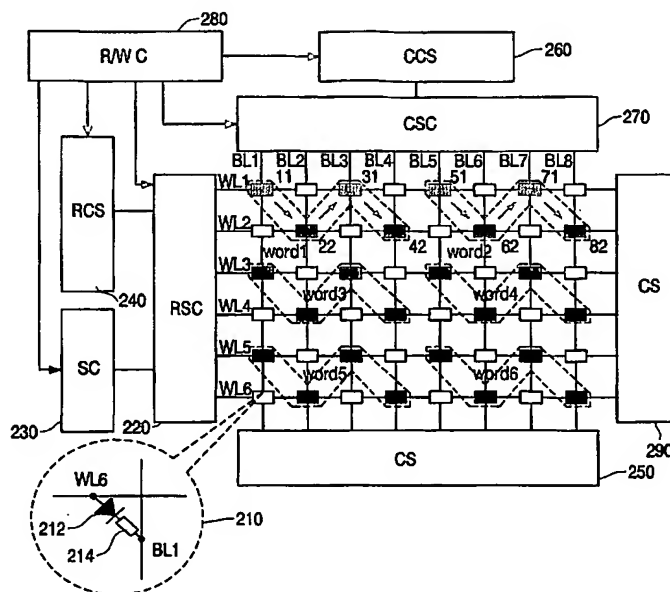
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(54) Title: **SIMULTANEOUS READING FROM AND WRITING TO DIFFERENT MEMORY CELLS**



(57) Abstract: A nonvolatile memory array includes a grid of word lines WL1,...,WL6 and bit lines BL1,...,BL8. Of a plurality of memory cells 210, each memory cell is located at an intersection region of one of the word lines and one of the bit lines. A read/write circuit 280 for reading/writing a data word including a plurality of bits is operative to map each pair of sequential bits of the data word to a respective pair of memory cells located at intersection regions of both a different word line and a different bit line.



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